

November 22, 2010

Federal Communications Commission  
445 12th St., S.W.  
Washington, D.C. 20554

Re: COUNTY OF RIVERSIDE COMMENTS IN RESPONSE TO FCC  
PN DA 10-1877; PS Docket No. 06-229; 28 September 2010.

**What is the current and anticipated use of 700 MHz narrowband networks?**

Since 2000, Region V-700 MHz in Southern California has been extremely active and diligent in the planning, coordination and implementation of the narrowband channel allocations. The Region V-700 MHz RPC established quasi-standards to follow regarding compliance to the Region V National Plan and facilitating the coordination procedures for licensing applications. The major counties of Southern California and cities such as Los Angeles, San Diego and Long Beach have licensed narrowband channels or have plans for voice or data systems. Region V has also produced a 700 MHz Interoperability Plan recently approved by the California SIEC and now being implemented by associate entities.

The County of Riverside commenced planning for a replacement of its legacy 800 MHz NPSPAC EDACS countywide radio system long before the 800 MHz Rebanding program was enacted by the FCC. In January 2007 the county Board of Supervisors approved the award of a contract to Motorola for a P25 digital voice and data mobile radio system. This system, called Public Safety Enterprise Communications (PSEC), is based on a 700 MHz, 800 MHz, and VHF tri-band backbone; it is IP-based and networked employing Motorola High Performance Data (HPD) and 4.9 GHz backhaul. Motorola produced this tri-band radio to meet PSEC specifications. PSEC is comprised of 75 sites throughout 7200 sq miles and interconnected by 80 new microwave links. The County of Riverside has a population of approximately 2 million, and has been one of the fastest growing areas in California and the U.S. since 1990. The Region V-700 MHz RPC approved the allocation of 196 narrowband channels in consonance with the publication of the new 700 MHz Region V Plan approved by the FCC. During June 2008, the FCC approached the County of Riverside and strongly advocated that PSEC employ 700 MHz as the system backbone in lieu of the 73 - 800 MHz channels being planned. This action apparently would greatly help the FCC and the TA with Wave 4 800 MHz Rebanding plans and the ongoing U.S. - Mexico negotiations regarding changes to the 800 MHz agreement.

The County of Riverside would abdicate all of its current and planned PSEC 800 MHz channels in exchange for the implementation of a total 700 MHz system with FCC and Sprint-Nextel priority support. PSEC was facing the risk of redesign, since the project

had commenced the implementation stage. The County Sheriff, Fire Chief and the Board of Supervisors approved and elected to take the risk despite the additional cost and potential impact to the project timeline. Currently, PSEC is employing 16 - 25 KHz data channels and 76 - P25 voice channels. These channels support 24 data access sites, six simulcast trunking cells, and 15 stand alone trunking sites. Most of the channels are reused at minimum twice throughout the county. The initial subscriber deployment will be 4000 voice radios and 2000 data radios controlled through three Sheriff 911/ Radio Dispatch Communication Centers and linked to a secondary Fire PSAP. After redesigning PSEC to 700 MHz, the project installation phase commenced in September 2009. The current operational commissioning date is projected at June 2012. Upon cutover to PSEC, the existing EDACS 800 MHz system will be deactivated and the frequencies relinquished to the TA. Currently, 27 700 MHz licenses have been granted by the FCC and 5 applications are pending.

### **The Impact of Interleaving Broadband & Narrowband**

The County of Riverside joins the Region V-700 MHz RPC in opposing the use of any portion of the narrowband spectrum for broadband systems. When the initial 24 MHz of 700 MHz TV broadcast spectrum was allocated to Public Safety by the 1997 Budget Act ( FCC WT Docket # 96-86 ), Region V worked laboriously to meet the January 1, 2000 filing window to develop the Regional Plan. All counties and major cities in Southern California had to strongly justify their respective narrowband and wideband projected long-term requirements. The Region Narrowband Plan was ultimately approved by the FCC in 2002. The wideband planning was put on hold by the FCC and through time, has dissipated and has been replaced with the broadband concepts of today. The original agency 700 MHz wideband requirements identified and justified in 1999 remain. It is critical that the narrowband channel plan remain independent of the broadband spectrum. Region V needs this narrowband spectrum to also contend with requirement restrictions due to the Mexican border PFD limitations, not faced by most regions in the U.S. interior. The County of Riverside is committed to its \$150 million PSEC investment project. To change the Region V-700 MHz narrowband plan at this juncture would be detrimental and unacceptable to the County of Riverside, especially after the County of Riverside agreed to the FCC request for PSEC to move to a fully 700 MHz system in lieu of the planned 800 MHz backbone to assist in the rebanding problems with Mexico.

Wideband requirements are supported by Region V and are being implemented by the PSEC project for Motorola's High Performance Data (HPD) system; aggregation of allocated narrowband channels is satisfying this bandwidth. The HPD system generates a data rate of 96KB in 25 KHz channels. This is comparable to the original 2001 Region V wideband data planning based on aggregated 50 KHz channels. The 5 MHz Broadband channels would exhaust the 700 MHz narrowband spectrum and leave unacceptable channel availability.

The County of Riverside has voiced its support through Congressional representatives for the 700 MHz D Block allocation to Public Safety for future broadband applications

decentralized to regional planning. There is no question that Public Safety needs broadband spectrum. There is growth in the employment of 4.9 GHz for airborne video and terrestrial mesh networks; although regional planning is not effective and uncontrolled due to no formal FCC mandate. At this stage of the maturation of the 700 MHz planning and implementation for the County of Riverside and Region V, the interleaving of broadband destroys our current investments and monumentally impacts with immeasurable cost and operational capability. The Counties and cities of Southern California have spent thousands of man-hours during the last ten years in the evolution of the 700 MHz Public Safety spectrum and the Region V National Plan. The FCC proposal would undermine everything accomplished to date and expect local governments to have the economic resources to recoup ongoing telecommunications investments and start over again. We remind the Commission of the 1996 PSWAC report projecting the need for 25 MHz additional spectrum for Public Safety through 2010 for voice and data (formerly Wideband).

In addition to the impact described above, the interleaving creates a monumental engineering and structure interference protection problem for the FCC to solve. We don't believe that mixing Broadband and Narrowband technologies in the same geographic areas are compatible.

#### **Impact to Support Narrowband Interoperability**

The County of Riverside supports the position taken by the 700 MHz Region V. The Region V 700 MHz interoperability plan has been completed and approved by the California SIEC. The backbone of this regional plan is built on the FCC allocated narrowband interoperability channels with dedicated channels assigned to specific Southern California counties. Several agencies have already submitted license applications. As with the comments from above and interference resolution aside, the incongruity of dissimilar systems and structure of geographic regions would severely impact the standardization of regional and nationwide interoperability and its governance.

#### **How Much of the Narrowband Allocation and Guard Band be Made Available for Broadband?**

As stated in prior paragraphs above, the County of Riverside does not support allocating any of the Narrowband and Guard Band referenced in this notice for Broadband.

#### **If flexibility in the narrowband spectrum were allowed, what role should the 700 MHz RPCs and the states play in its implementation?**

California, especially Region V (Southern California) with APCO has been a recognized national leader in Public Safety communications; i.e. P16, P25, and the first approved 800 MHz and 700 MHz National Plans. The Region V 800 MHz NPSPAC National Plan

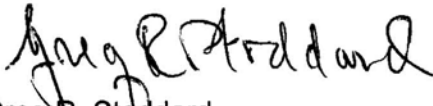
has been a viable working planning and coordination instrument for 20 years. The RPCs are in a more effective position and have experience to effectively plan and manage spectrum within their respective areas of responsibility. The Region V RPC also maintains a strong working relationship with the State of California SIEC (CALSIEC). The County of Riverside advocates the role of the 700 MHz RPCs and State SIECs in managing Broadband spectrum in their jurisdictions.

**What if any Impact Should This Have On Existing Rules That Require Narrowband Systems To 6.25 kHz By Channels By December 31, 2016?**

The County of Riverside believes this date should remain in effect and to be in harmony with the implementation of P25 Phase II and the overall long-standing objectives of the FCC Narrowband Refarming Program.

Please direct responses and questions to John Sarkissian at 951-486-7757;  
[Jsarkiss@RiversidecountyIT.org](mailto:Jsarkiss@RiversidecountyIT.org).

Thank you,

A handwritten signature in black ink, appearing to read "Greg R. Stoddard". The signature is fluid and cursive, with the first name "Greg" being the most prominent.

Greg R. Stoddard,  
Chief Technology Officer  
County of Riverside